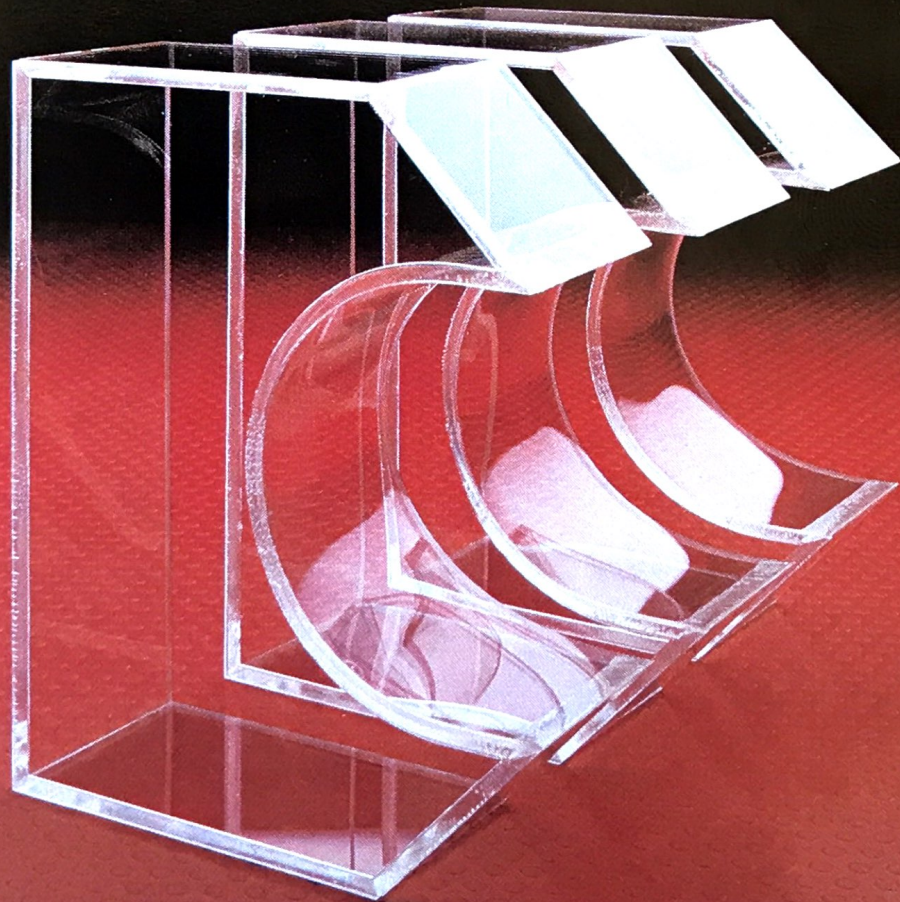


# CUMANA

*The best name in memory*





# Memories are priceless... Ours cost a lot less!

This catalogue shows the extensive range of microcomputer peripherals available from Cumana, compatible with the BBC, Dragon, Oric, Spectrum, and Tandy I, III and 4.

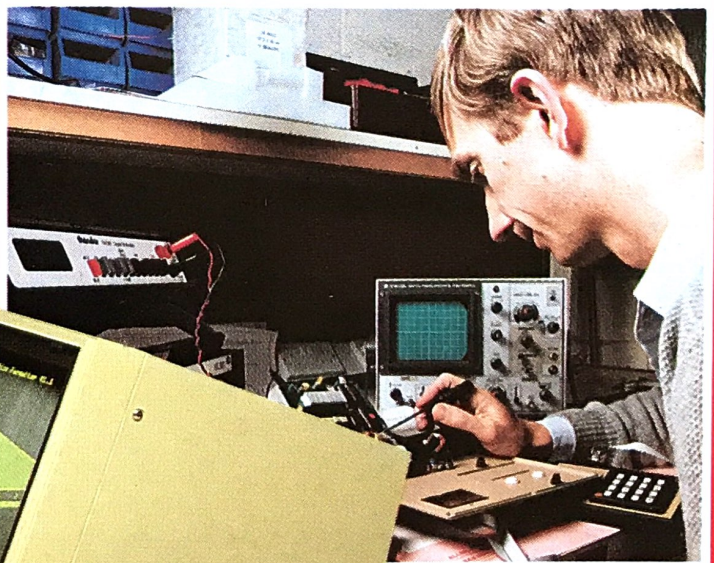
All Cumana disk drives are fully assembled and tested before packaging, have a twelve month warranty, and are finished in an attractive hard wearing beige cabinet.

- Cumana gives free technical training to all Local Authorities.
- Cumana disk drives are approved by the D.M.E.E. for electrical safety for use in G.L.C. and I.L.E.A. establishments.
- Disk drives are tested by the Test Bureau, with technical reports available on request.
- Cumana were the first independent disk drive supplier, and is now Europe's market leader.
- Top quality 5¼" and 3½" disk drives used throughout.

## Free Training



## Safety Proven





# CS RANGE

The Cumana single "CS" range of disk drives have an independent power supply, with mains lead and insulated moulded plug. They are supplied with formatting diskette, 2-drive connecting cable and User Guide. Upgrading is simple, with Cumana's design enabling a second disk drive to be added without any modification to your microcomputer.

*All 80 track drives are switchable to 40 track mode.*

**CS100 40 track, single sided (100k)**

**CS200D 40 track, double sided (200k)**

**CS200 80 track, single sided (200k)**

**CS400 80 track, double sided (400k)**





# CSX RANGE

The Cumana – excluding power supply – “CSX” range of disk drives take power from your microcomputer with lead, formatting diskette, and User Guide supplied. Cumana’s design enables a second drive – with its own power supply – to be added very simply, without any modification to your microcomputer. All that is needed is a 2-drive connecting cable. All 80 track drives are switchable to 40 track mode.

**CSX100 40 track, single sided (100k)**

**CSX200D 40 track, double sided (200k)**

**CSX200 80 track, single sided (200k)**

**CSX400 80 track, double sided (400k)**





# CSE RANGE

The Cumana single – “CSE” range of disk drives have an independent power supply and are supplied complete with mains lead and moulded insulated plug, but excluding other accessories. They can be used to upgrade a system, with the simple addition of a 2-drive connector cable. This will enable you to add a second drive by simply plugging in and switching on. These drives are also suitable for use with Tandy model I and as

external drives for Tandy models III and 4. *All 80 track drives are switchable to 40 track mode.*

**CS100E 40 track, single sided (100k)**

**CS200ED 40 track, double sided (200k)**

**CS200E 80 track, single sided (200k)**

**CS400E 80 track, double sided (400k)**





# DUAL RANGE

The Cumana dual "CD" range of disk drives have an independent power supply, with mains lead and moulded insulated plug. They are supplied with formatting diskette, drive connecting cable and User Guide.

*All 80 track drives are switchable to 40 track mode.*

**CD200 2 x 40 track, single sided (200k)**

**CD400/S 2 x 80 track, single sided (400k)**

**CD800/S 2 x 80 track, double sided (800k)**





# 3 $\frac{1}{2}$ " SINGLE DRIVES

Cumana's 3 $\frac{1}{2}$ " drives are built to the same high standards as Cumana's 5 $\frac{1}{4}$ " range, with the added bonus of being more compact, thus taking up less of your valuable peripheral space.

They come in two formats, the "CSX" range – which takes power from your BBC microcomputer, and the "CS" range which comes complete with its own independent power supply, mains lead and insulated plug.

**CS351 40 track, single sided (100k)  
complete with power supply.**

**CS354 80 track, double sided (400k)  
complete with power supply.**

**CSX351 40 track, single sided (100k)  
excluding power supply.**

**CSX354 80 track, double sided (400k)  
excluding power supply.**





# 3 $\frac{1}{2}$ " DUAL DRIVE

The Cumana Dual "CD" range of 3 $\frac{1}{2}$ " disk drives have an independent power supply, with mains lead and moulded insulated plug. The CDX range takes its power from the BBC microcomputer.

**CD352 2 x 40 track, single sided (200k)**

**CD358 2 x 80 track, double sided (800k)**

**CDX352 2 x 40 track, single sided (200k)**

**CDX358 2 x 80 track, double sided (800k)**

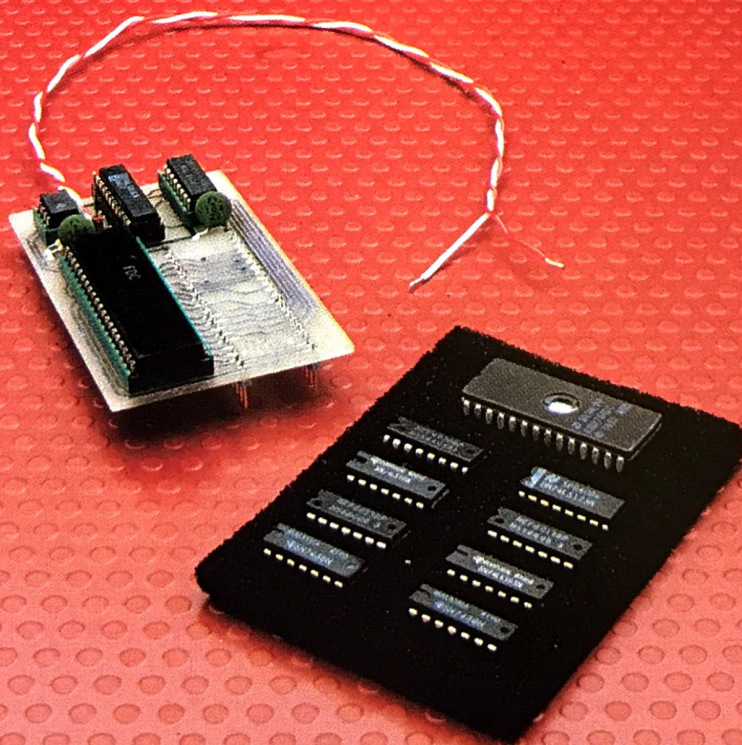




# QFS KIT

Cumana QFS is supplied as a kit of integrated circuits and a small printed circuit board which plugs into empty sockets within the BBC microcomputer. The kit is supplied with full instructions and should take no longer than 15 minutes to fit – overall.

The QFS has already received support from leading software houses and is being taken up by major hardware distributors across the country.





# APPLE DRIVE

The Cumana single Apple drive is compatible with the Apple 11 and 11E, it is supplied with an interface cable which connects to a standard Apple controller card.

Apple is a registered trademark.





# DRAGON RANGE

Cumana offer both single and dual drives in their Dragon range. Both come complete with demonstration diskette, ROM based cartridge adaptor, disk users guide and drive connecting cables; and upgrading your system is no problem. Cumana's design enables up to four disk drives to be added without any modification to your Dragon micro computer. Dragon is a registered trademark.





# ORIC RANGE

Cumana offer both single and dual drives in their Oric range. Both come supplied with demonstration diskette, Oric compatible DOS cartridge adaptor, disk User Guide and drive connecting cable.

Oric is a registered trademark





# BETA SPECTRUM DISK INTERFACE

At last, Spectrum owners can upgrade their machines to take full advantage of the speed and convenience of floppy disk operating. The Beta Spectrum disk interface is fully compatible with both Cumana 5¼" and 3½" 40 or 80 track, single or double sided disk drives. Each interface comes complete with a User Manual. From the word go you can transfer the contents of one disk to

another or make copies of individual programs or data to any other disk. The new Beta disk interface only uses 128 bytes of Spectrum memory, so what have you got to lose?





# ACORN ELECTRON

A microcomputer with a proven track record. Using BBC basic, the Electron was developed out of the micro that has been chosen for over 80% of schools participation in the government's current micro in schools project. It connects into almost any TV set and cassette player and is supplied with a comprehensive user guide which runs through, in a simple to follow manner, the basic principles of programming. A wide range

of software is available, including games, educational packages and home accounts.

Also available Cumana's disk interface for use with Acorn Electron.

The disk interface plugs into the Plus One expansion.





# CUMANA TOUCH PAD

The Touch pad is a low-cost graphic plotting aid for the BBC micro. This compact display cursor moving device simplifies programming with the touch of the stylus.

The product comes complete with an instruction booklet, basic software, stylus and connecting cable. Its uses are in graphics, computer aided design, education and games.





# CUMANA ACCESSORIES

Diskette head cleaner, dual drive cover, single drive cover and BBC keyboard cover, 3½" diskettes, 5¼" diskettes complete with library case. Cumana data cassette (C12), TDK data cassettes PC10,

PC12 & PC15 and TDK diskettes M1DS 10 and 2 pack.









# TANDY MODELS III, 4 AND RS

*For external drives see page 5*

The model III/4 kit contains internal disk drive mounting frame with Astec switched mode power supply, disk controller board plus all cables, connectors, screws and fitting instructions.

The following kits all contain the model III/4 kit plus the following variations.

## **CS40**

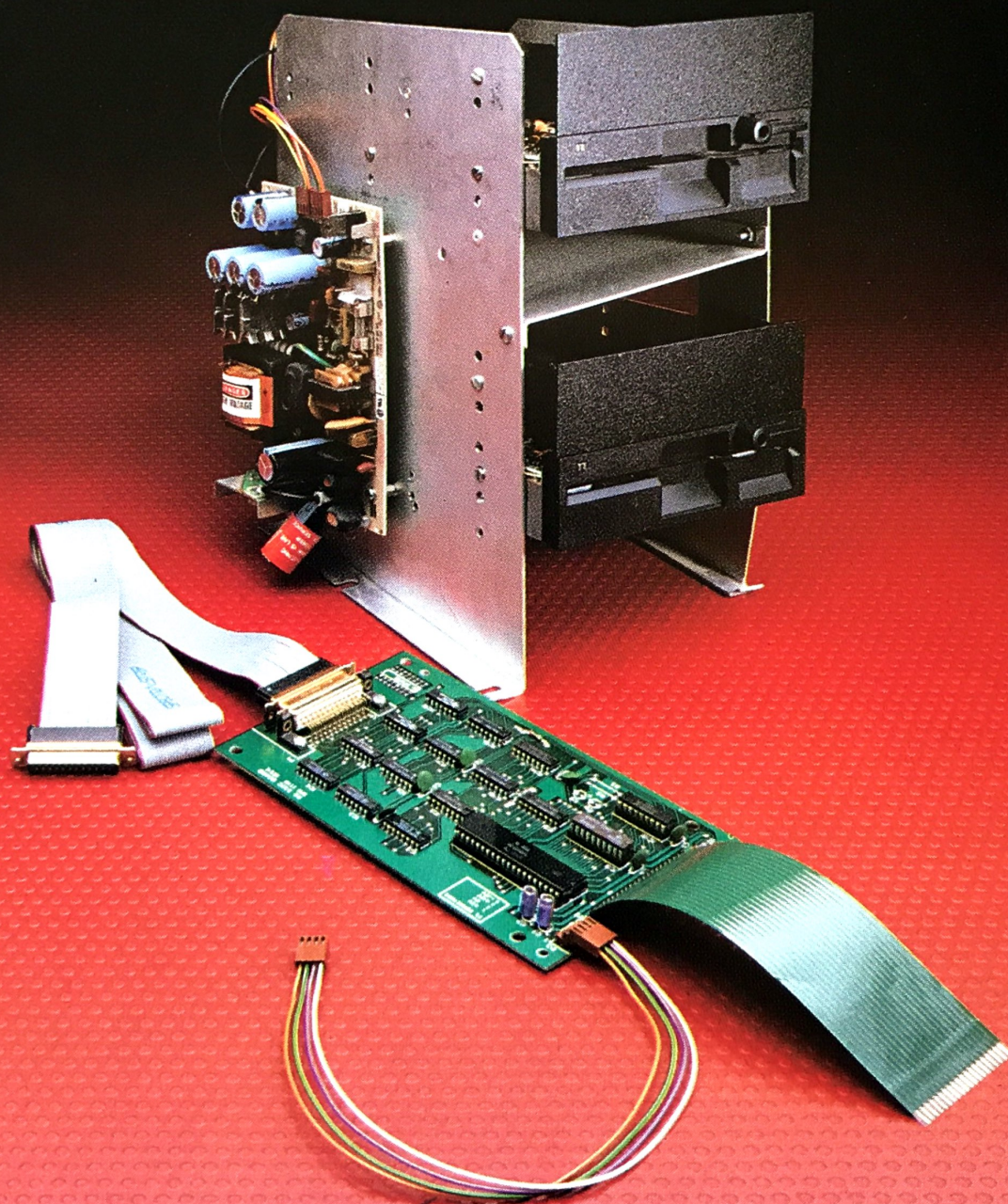
CS40 contains model III/4 kit with one Japanese 5 $\frac{1}{4}$ " 40 track, single sided drive installed.

## **CD40**

Model III/4 kit with two Japanese 5 $\frac{1}{4}$ " 40 track single sided drives installed.

## **CS80**

Model III/4 kit with one Japanese 5 $\frac{1}{4}$ " 80 track, single sided drive installed.





# 232 BOARD

## **CD80**

Model III/4 kit with two Japanese 5¼" 80 track, single sided drives installed.

## **CS80D**

Model III/4 with one Japanese 5¼" 80 track, double sided drive installed.

## **CD80D**

Model III/4 kit with two Japanese 5¼" 80 track, double sided installed.

## **RS232C Controller board:**

Suitable for use with Tandy models III/4 supplied with mounting kit and fitting instructions.

## **RS232C Cable**

1.5 metre interface cable for use with RS232 controller.

## **SECOND-TO-NONE SERVICE**

Since its inception, Cumana, Europe's leading floppy disk drive supplier, has built-up an enviable reputation for reliability and first-class service, with full technical back-up.

In line with the company's commitment to providing a professional and reliable service, Cumana has recently launched a new and larger service centre, which, in addition to providing fast and efficient warranty maintenance for the full range of Cumana products, also offers out-of-warranty repair arrangements, annual maintenance contracts and 'one-off' repairs or upgrades.

These services are available for a wide range of microcomputers and associated peripherals, such as monitors, printers, disk drives, modems, etc., at very attractive rates. For example, a 12-month maintenance agreement for the standard BBC Micro model B, inclusive of all parts, all labour, VAT and speedy return carriage by special courier, works out at only 87p a week.

Cumana also operates a new second and third year extended warranty scheme for its full range

of disk drives at very competitive prices. In addition, the service department will service and repair non-Cumana disk drives and other peripherals.

One further important feature of Cumana's service centre is that it is the first and so far only facility in Europe able to service the new Mitsumi quick drive used on some of the MSX range of home micros.

The new Cumana service centre provides consumers, retail outlets and distributors with a fast, efficient, full repair facility, operated by highly-trained engineers with many years experience in the computer and electronics industries. They are fully experienced in the new 3in and 3½in disk drives, and use the latest in test equipment and techniques.

Situated on the Royal Oak Industrial Estate in Daventry, Northants NN11 5QJ (Tel: 03272 79494), the service facility is within easy reach of both the M1 and M6 motorways, enabling fast and efficient support for almost anywhere in the UK.

Free technical training for distributors and local authority technicians has now been transferred to the service centre from Cumana's Guildford HQ.

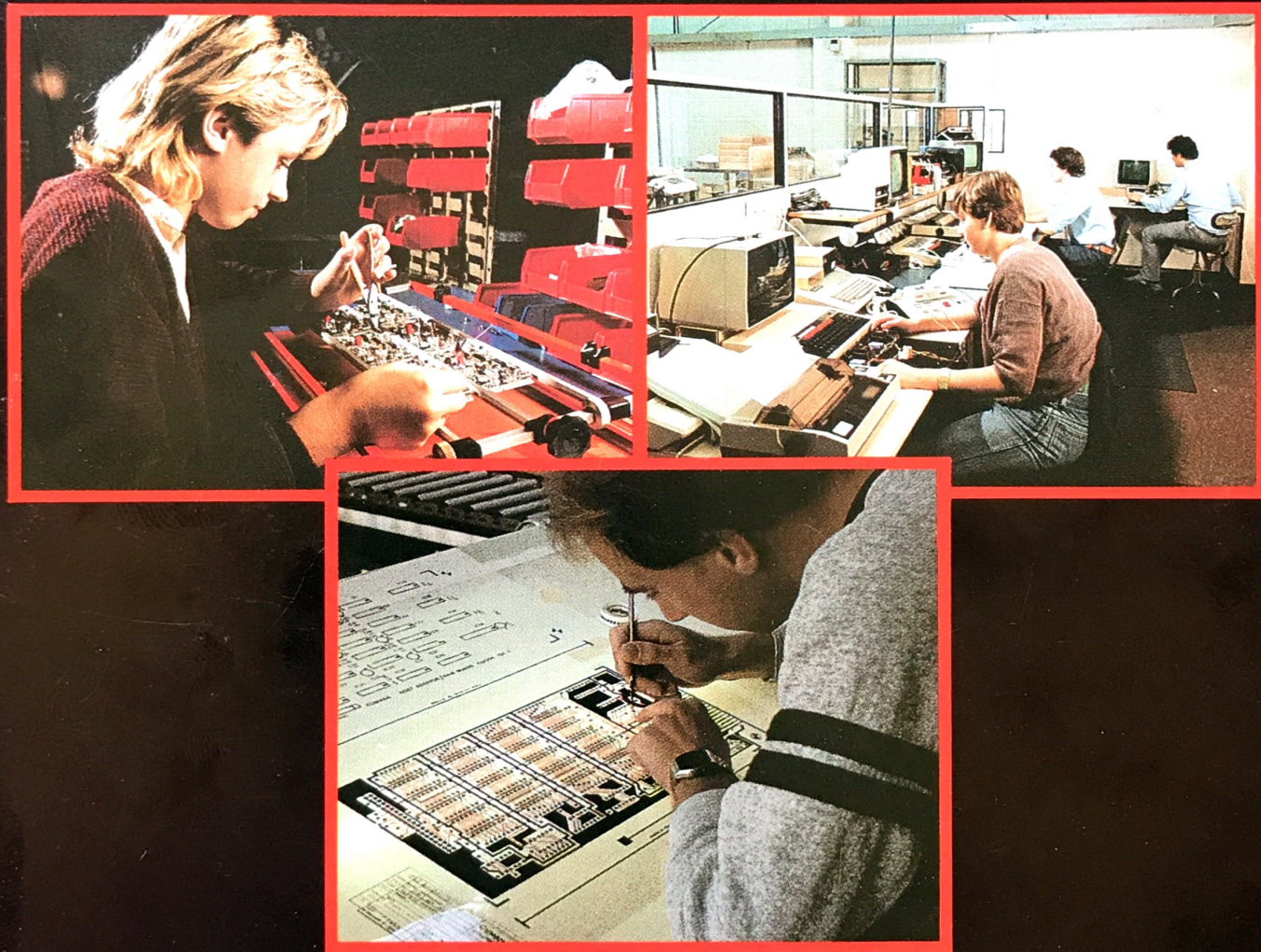


**In the rapidly expanding world of computer peripheral equipment there is one name which continually leads the field – Cumana.**

**Quality is our standard. Whether it is the best Japanese components used in our top quality designs, the rigorous training which all staff receive, or the unsurpassed**

**technical service we offer, everything must be of the highest standard.**

**We are the market leaders and intend to stay there. So, when others disappear you can be sure that Cumana will still be offering top quality products at unbeatable value for money prices.**



E&OE



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